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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,896	10/30/2003	David R. Oran	112025-0424C1	9197

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EXAMINER	
BEHNCKE, CHRISTINE M	

ART UNIT	PAPER NUMBER
3661	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/697,896	ORAN ET AL.	
	Examiner	Art Unit	
	Christine M. Behncke	3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 April 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *21-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *21-31 and 35-38* is/are rejected.

7)☒ Claim(s) *32-34,39 and 40* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 October 2003 and 18 April 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the Remarks filed April 18, 2005, in which claims 21-40 were presented for examination.

2. The Examiner acknowledges the amended drawings filed April 18, 2005 and withdrawals the previous objection to the drawings.

3. The Examiner acknowledges the amended specification filed April 18, 2005 and withdrawals the previous objection to the specification.

Response to Arguments

4. Applicant's arguments, see Remarks, filed April 18, 2005, with respect to the rejection of claims 29 and 30 under USC § 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Sandhu et al., please see the following rejection discussion.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 35 is rejected under 35 U.S.C. 102(e) as being anticipated by Bird et al., US Patent No. 6,526,341.

Bird et al. discloses a system for discovering and maintaining geographic location information for network sites, the system comprising: means for generating physical coordinates corresponding to the location of a first network entity (element 102, Column 4, lines 52-62); means for loading the physical coordinates generated for the first network entity into one or more network messages (Column 4, line 63-Column 5, line 4); means for sending the one or more network messages to a selected intermediate network device for storage thereby (central station 104, Column 2, lines 48-67).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 21, 22, 28-31, 35, and 37 are rejected under 35 U.S.C. 102(e) as being anticipated by Sandhu et al., US Patent Application Publication No. 2002/0145561.

7. (**Claim 21**) Sandhu et al. discloses a system for discovering and maintaining geographic location information for network sites, the system comprising: a portable computing unit having a location discovery entity (processor 16-i with Memory 17-i), a

message generator configured to generate network messages (processor 16-i, [0022]), and a communication facility for transmitting the network message onto a computer network (wireless modem 18-i to connect to communication network 6 and data network 4); and a location generator configured and arranged to determine physical coordinates for its current location (GPS receiver 15-i), the location generator coupled to the computing unit for providing physical coordinates thereto (figure 2 and [0020]); whereby, the discovery entity and the message generator cooperate to acquire physical from the location generator for a given network site ([0020]), and to load the acquired physical coordinates into one or more network messages (outbound package which contains a location stamp designating the location of the mobile unit at the time of the transmission), and the communication facility transmits the one or more network messages containing the physical coordinates to a designated network entity ([0020]-[0022], service provider 8).

8. (**Claim 22**) Sandhu et al. further discloses wherein the location generator includes a Global Positioning System (GPS) receiver for determining physical coordinates (GPS receiver 15-i).

9. (**Claim 28**) Sandhu et al. discloses a method for discovering and maintaining location information of a plurality of network entities forming a computer network (mobile units 10-i, figure 1), the method comprising the steps of: utilizing a Global Positioning System unit to derive physical coordinates of a location associated with a first network entity of the computer network (GPS receiver 15-i, [0020]); generating one or more network messages containing the physical coordinates derived for the network entity

(outbound package containing a location stamp, [0022]); and sending the one or more network messages containing the physical coordinates to a second network entity of the computer network (forwarding an announcement containing the location stamp of the source unit to a designated unit, [0024] and [0031]), whereby the second network entity associates the physical coordinates with the first network entity ([0031]).

10. (**Claim 29**) Sandhu et al. discloses a storage medium containing program instructions executable by a processing element (processing station 40) for associating physical location information with one or more network messages originating from a source entity (mobile unit 10-i transmitting an outbound package), the one or more network messages being directed to a destination entity (other mobile units 10-i of a selected distribution group), the program instructions comprising program instructions for: receiving physical coordinates of the location of the source entity ([0022], lines 27-36 and [0031]); storing the physical coordinates received for the source entity (Location database 46 [0027]); receiving the one or more network messages originating from the source entity (outbound package message via the communication network 6, [0018]); forwarding the one or more network messages toward the destination entity (announcement message is sent to users of a distribution group, [0031]); sending the physical coordinates received for the source entity to the destination entity (message contains location stamp indicating current location of the sender, wherein location data is a street address or latitude, longitude, and altitude [0031]).

11. (**Claim 30**) Sandhu et al. further discloses wherein the program instructions for sending comprise program instructions for appending the physical coordinates to at

least one of the one or more network messages originating from the source entity (location stamp [0031]).

12. (**Claim 31**) Sandhu et al. further discloses wherein the program instructions for sending comprises program instructions for: generating one or more network messages that are separate from the network messages originating from the source entity (generates a message in response to a request from a destination entity for the location of a target user, [0032]); loading the physical coordinates into the one or more separate network messages (retrieves location information from the location database and transmits it to the requester [0032]); sending the one or more separate network messages to the destination entity (transmits the information via a response package, containing the requested information [0032]).

13. (**Claim 35**) Sandhu et al. discloses a system for discovering and maintaining geographic location information for network sites, the system comprising: means for generating physical coordinates corresponding to the location of a first network entity (GPS receiver 15-i, [0020]); means for loading the physical coordinates generated for the first network entity into one or more network messages (outbound package containing a location stamp, [0022]); means for sending the one or more network messages to a selected intermediate network device for storage thereby (outbound package message via the communication network 6, [0018] and Location database 46 [0027]).

14. (**Claim 37**) Sandhu et al. discloses wherein the network site corresponds to the network entities of a computer network disposed within an office ([0019] wherein the

mobile unit includes but is not limited to wireless telephone, laptop, personal digital assistant, and pager).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

16. **Claims 23 and 36** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandhu et al. in view of Lin et al., US Patent Application Publication No. 2002/0059420.

Sandhu et al. discloses the system for discovering and maintaining geographic location previously described but does not disclose the use of an inertial navigation unit. However, Lin et al. teaches a networked position multiple tracking system for discovering and tracking the location of a mobile unit, wherein the location generator includes using a GPS receiver and a self-contained miniature inertial measurement unit (IMU) to produce signals responsive to the unit being moved ([0012] and [0031]-[0033]), the inertial navigation unit is coupled to a portable computing unit (system processor 30) for providing the inertial navigation signals thereto, and a discovery entity is configured to integrate the inertial navigation signals with physical coordinates acquired by a GPS receiver for a substitute location to produce physical coordinates for a given network site (position producer 10, [0038], and [0078]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the system of Sandhu et al. with the teachings of Lin et al. because as Lin et al. suggests, the inclusion of an inertial navigation unit allows the device to track an object/person inside an open area and a building uninterrupted and with increased accuracy ([0031]).

Claim Rejections - 35 USC § 103

17. Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandhu et al. in view of Fullerton et al., US Patent Application Publication No. 2003/0197643.

18. (**Claim 24**) Sandhu et al. discloses the system for discovering and maintaining geographic location previously described but does not disclose the use of an antenna and using triangulation means for locating the position of the portable/mobile unit. However, Fullerton et al. teaches a system of locating a position of a mobile unit using an antenna coupled to a portable computing unit (directional antenna, [0118]), the one or more antenna configured to receive radio signals from a plurality of transmitting base stations ([0123]), wherein the radio signals are encoded with physical coordinates of the respective base station ([0116]), and the location discovery entity is configured to compute the physical coordinates for its current location based on the received radio signals ([0116]).

19. (**Claim 25**) Further, Fullerton et al. teaches employing triangulation techniques to compute the physical coordinates for its current location ([0116]).

20. (**Claim 26**) Further, Fullerton et al. teaches wherein the radio signals are Ultra Wideband (UWB) radio signals ([0078]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the system of Sandhu et al. with the teachings of Fullerton et al. because the taught triangulation technique of Fullerton et al. is a well known position discovery technique that is inexpensive comparatively to GPS, can be widely implemented, and with the use of UWB signals, with can transmit through earth, buildings and other obstructions, have a high level of accuracy ([0007]).

Claim Rejections - 35 USC § 103

21. **Claims 27 and 38** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandhu et al. in view of Overton et al., US Patent Application Publication No. 2002/0032787.

Sandhu et al. discloses the system for discovering and maintaining geographic location and wherein the network site is a phone (Abstract and [0019]) and transmits the location over a network such as the Internet, but does not explicitly disclose wherein the network site corresponds to a Voice over Internet Protocol phone. However, Overton et al. teaches for tracking and maintaining the location of a mobile phone or other object, the phone can use a Voice over Internet Protocol system ([0159]). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the system of Sandhu et al. with the teachings of Overton et al. because both Sandhu et al. and Overton et al. suggest that transmitting phone calls over the internet increases

utility and decreases cost because the network does not need to go through a third party phone (long-distance or local) system.

Allowable Subject Matter

22. **Claims 32-34, 39 and 40** are objected to as being dependent upon a rejected base claim and are at present considered to overcome the prior art of record if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine M. Behncke whose telephone number is (571) 272-8103. The examiner can normally be reached on Monday - Friday 8:30 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

06-24-2005

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